

**Great Lakes Acoustic SOP Workshop**  
**September 8 – 11, 2008**

**Location: Michigan DNR Charlevoix Fishery Research Station,  
Charlevoix, Michigan**

**Hosted by: Randy Claramunt, Lars Rudstam, Sandra Parker-Stetter, Dave Warner, Dan Yule, and Patrick Sullivan.**

**Preliminary Agenda**

**Monday, Sept. 8, Starting at 12 noon**

- Group discussion on challenges to acoustic data collection and analysis
- Basic acoustic theory (*Rudstam*)
- Presentations of suggested Standard Operating Procedures for Great Lakes Acoustics (*Rudstam*)
- Overview of acoustic processing software
- Monday evening social

**Tuesday, Sept. 9**

- In-field calibration with standard targets, identification of noise sources, checking system performance, and passive data collection for noise calculations aboard the RV Steelhead in Lake Michigan (*Warner and Claramunt*)
- Analysis of calibration and noise data and interpretation of results (*Rudstam and Warner*)

**Wednesday, Sept. 10**

- Analysis of acoustic data (brought by participants or provided) from several Great Lakes, including data preparation, separating groups of interest (e.g., trawl partitioning, target strength distributions, thresholding, multifrequency), and data processing. Instruction and group exercises (*Rudstam, Warner and Yule*)

**Thursday, Sept. 11**

- Analysis of surveys using cluster analysis and geostatistics (*Sullivan*)
- Uncertainty analysis – where are the main issues? (*Sullivan and Rudstam*)
- Group discussion and wrap-up

**Sponsored by the Great Lakes Fishery Commission  
Science Transfer Program**

# Great Lakes Acoustic SOP Workshop

## September 8 – 11, 2008

### REGISTRATION FORM

Great Lakes Acoustic SOP Workshop

*NAME: First* \_\_\_\_\_ *M.I.* \_\_\_\_\_ *Last* \_\_\_\_\_

Affiliation / Organization Name: \_\_\_\_\_

<i>Work Phone</i>	(____) - ____ - ____ ext ____	<i>Cell Phone:</i>	(____) - ____ - ____
<i>Street Address</i>			
<i>City, State, Zip</i>			
<i>Email Address:</i>			
<i>Questions or Special Requests</i>			

Cost of the workshop is \$50.00 payable to: MDNR Fisheries Acoustic Workshop  
Charlevoix Fisheries Research Station, 96 Grant Street,  
Charlevoix MI 49720

Return the registration and payment to: \_\_\_\_\_

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 Your Receipt::

Acoustic Workshop	Date Received _____
September 8 -11, 2008	_____ on _____
Payment Type	CHECK OR CASH
Amount Received \$ <u>50.00 US</u>	to cover the cost of the workshop. (Exact cash or check made payable to MDNR Fisheries Acoustic Workshop)
Location: <u>Charlevoix Fisheries Research Station</u>	MI <u>231-547-2914</u>
Signature _____	Date _____

**Registration is due by July 15, 2008 and limited to 25 people.**

\*if greater than 25 applications are received, the number of attendees from individual agencies or groups may be restricted to allow for a more representative distribution of acoustic users. If it becomes necessary to limit attendees from an individual agency or group, all applicants from that group will be notified of the number of available spaces so that the agency or group may select attendees.



## **Hotel Accommodations and Directions:**

### **Hotels:**

**Weathervane Terrace Inn and Suites:** Discounted rates include \$49 for a standard room, \$59 for a patio room, and \$69 for a Lake Michigan Suite. All of the rooms have microwaves and refrigerators. A continental breakfast is provided each morning from 7 to 11 a.m. The Weathervane is within walking distance from the Charlevoix Fisheries Station and a block of rooms have been held for workshop. To reserve a room, please call 1-800-552-0025 and ask for the DNR fisheries workshop rate.

**AmericInn of Charlevoix:** Discounted rate is \$54 for a standard room. The AmericInn is new and located in a rustic setting approximately 2 miles from Charlevoix. It is directly across from the Little Traverse Wheelway (a 29 mile hiking, biking, and walking trail that winds along Lake Michigan) and the hotel has an indoor pool, sauna, and whirl pool. Free continental breakfast, and offers high speed internet. Also, has expansive parking for boats, trailers, and RV's. To reserve a room call 231-237-0988 and ask for the DNR fisheries workshop rate.

**The Lodge:** Discounted rate of \$45 for a standard room and includes a continental breakfast. Reservations can be made by calling 1-888-547-6565.

### **Questions?**

**Randy Claramunt:** [claramur@michigan.gov](mailto:claramur@michigan.gov) , phone 231-547-2914

**Dan Yule email:** [dyule@usgs.gov](mailto:dyule@usgs.gov) , phone 715-682-6163

### **Directions to the:**

**Charlevoix Fisheries Research Station**  
**96 Grant Street**  
**Charlevoix, MI 49720**  
**Phone: (231) 547-2914; Fax: (231) 547-6031**

#### **From the south**

From: I-75 to Grayling, MI US

To: 96 N Grant St, Charlevoix, MI 49720-1327 US

#### **DRIVING DIRECTIONS**

##### **A) Grayling, MI US**

1. Start out going NORTHEAST on MICHIGAN AVE toward N JAMES ST/I-75 BL/MI-72.
2. Turn LEFT onto N JAMES ST/I-75 BL/MI-72. (go 0.2 miles)
3. Turn LEFT onto MI-72/MI-93. Continue to follow MI-72. (go 17.6 miles)
4. Turn RIGHT onto DARRAGH RD/CR-571. Continue to follow CR-571. (go 13.3 miles)
5. Turn SLIGHT RIGHT onto S WILLIAMS ST/US-131/MI-66. Follow US-131/MI-66 (1mi)
6. Turn LEFT onto MI-66. (go 31.0 miles)
7. Turn RIGHT onto BRIDGE ST/US-31. (go 1.0 miles)
8. Turn LEFT onto PARK AVE. (go 0.3 miles)
9. Turn RIGHT onto GRANT ST. (go 0.1 miles)
10. End at 96 N Grant St Charlevoix, MI 49720-1327

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To view your map, click on the link below or copy and paste it to your browser:

<http://www.mapquest.com/mq/3-T4ldxsi>

#### **From the north**

From: Saint Ignace, MI US

To: 96 N Grant St, Charlevoix, MI 49720-1327 US

#### **DRIVING DIRECTIONS**

##### **A) Saint Ignace, MI US**

1. Start out going WEST on N STATE ST/I-75 BL toward CENTRAL HL. Continue to follow I-75 BL. (go 1.6 miles)
2. Merge onto I-75 S (Portions toll). (go 8.9 miles)
3. Merge onto US-31 S via EXIT 336 toward PETOSKEY/CHARLEVOIX. (go 33.1 miles)
4. Turn RIGHT onto CHARLEVOIX AVE/US-31. Continue to follow US-31. (go 16.0 miles)
5. Turn RIGHT onto PARK AVE. (go 0.3 miles)
6. Turn RIGHT onto GRANT ST. (go 0.1 miles)
7. End at 96 N Grant St Charlevoix, MI 49720-1327

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To view your map, click on the link below or copy and paste it to your browser:

<http://www.mapquest.com/mq/4-7AOWclZVow1MARhPRCOj>